

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria. Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILIN	G DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,892	10/31/2003		Honkai Tam	SUNMP314	2989
32291	7590	07/21/2004		EXAMINER	
MARTINE		•	NGUYEN, HIEP		
710 LAKEW SUITE 170	VAY DRIVE		ART UNIT	PAPER NUMBER	
SUNNYVALE, CA 94085				2816	
				DATE MAILED: 07/21/200	4

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/698,892	TAM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Hiep Nguyen	2816				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days fill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 31 Oc	ctober 2003.					
<u> </u>						
3) Since this application is in condition for allowan	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4) ⊠ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ⊠ Claim(s) 19 and 20 is/are allowed. 6) ⊠ Claim(s) 1-6,8-14 and 16-18 is/are rejected. 7) ⊠ Claim(s) 7 and 15 is/are objected to. 8) □ Claim(s) are subject to restriction and/or						
Application Papers						
9) The specification is objected to by the Examiner						
10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priori application from the International Bureau * See the attached detailed Office action for a list of	have been received. have been received in Application ty documents have been received (PCT Rule 17.2(a)).	on No d in this National Stage				
AMoral and all N						
Attachment(s) 1) Notice of References Cited (PTO-892)	A) 🗂 1-4	DTO 4403				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (Paper No(s)/Mail Dat					
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal Pa					

Application/Control Number: 10/698,892

Art Unit: 2816

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Correction and/or clarification is required.

Regarding claim 18, the recitation "a storage cell output, the storage cell <u>input</u> being <u>opposite</u> the storage cell <u>output</u>, the output of the second reset device being coupled to the storage cell output, and <u>an input circuit</u> being coupled to the storage cell input" is indefinite because it is not clear what "being opposite" and "an input circuit" are meant by.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, 6, 8-14 and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (US Pat. 5,952,859).

Regarding claims 1, 2, and 8, figures 1B and 1A show a method of resetting jam latch comprising:

combining a respective data signal from each of a plurality of data lines (reset signal and feedback signal) to activate a first reset device (32);

activating a second reset device (38) with a control signal (in); and applying a reset voltage (high level) to a storage cell (I1, I2);

wherein combining the respective data signal from each of the plurality of data lines to activate the first reset device includes:

Application/Control Number: 10/698,892

Art Unit: 2816

J

coupling the respective data signal from each of the plurality of data lines to an activation device (36); and

outputting an activation signal (44) from the activation device to the first reset device (32), when a level of the respective data signal from each of the plurality of data lines is substantially equal (both data signals have high level to have a low level output 44). The control signal (In) is considered to be a clock signal.

Regarding claims 5 and 6, when signal (44) is high, transistor (32) is turned off and the voltage source is disconnected from the storage cell (I1, I2).

Regarding claims 9, 10, 11, 12, 13, 16 and 17, figures 1B and 1A show a jam latch reset circuit comprising:

an activation device (36) having respective inputs coupled to each one of a plurality of data lines (30, 34);

a first reset device (32) having a first control input coupled to an output of the activation device (36), the first reset device having a reset voltage source coupled to an input of the first reset device;

a second reset device (38) having a second control input coupled a control signal (in), the second reset device being coupled in series with the first reset device; and

a storage cell coupled to an output of the second reset device. The storage cell (I1, I2) is coupled to the output (drain) of the second reset device (38). The control signal (in) is considered to be a clock signal or a timing signal. The activation device (36) is a logic NAND gate.

Regarding claim 14, a voltage source coupled to the output of the storage cell through a voltage source controller (the first inverter of the feedback circuit). Note that the supply voltage (voltage source) is coupled to the output of the storage cell via a transistor of the first inverter of the feedback circuit. The data lines are (30) and (34).

Regarding claim 18, the structure of the storage cell is shown in figure 1B.

Application/Control Number: 10/698,892

Art Unit: 2816

لي

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (US Pat. 5,952,859).

Regarding claim 4, figure 1B of Kim includes all the limitations of claim 4 except for the limitation that the control signal is inverted. However, it is old and well known in the art that a signal is inverted before inputting to an input of a circuit for matching with the required polarity of the input of that circuit. Therefore, it would have been obvious to those skilled in the art to invert the control signal (in) if transistor (38) is changed to the opposite type of transistor.

Allowable Subject Matter

Claims 7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 19 and 20 are allowed.

Claims 15 and 17 are objected to because the prior art of record fails to teach or fairly suggest a method of resetting a jam latch comprising: comprising coupling a reset voltage across the activated first reset device and across the activated second reset device to apply the reset voltage to the storage cell as called for in claim 7; a voltage source controller including a control input coupled to the output of the activation device as called for in claim 15.

Claims 19 and 20 are allowed because the prior art of record fails to teach or fairly suggest a method of capturing data in a jam latch comprising: receiving a respective data signal on at least one of a plurality of data lines; charging a storage cell on storage cell input; outputting a data signal from a storage cell output; combining the respective data signal from

Art Unit: 2816

each of the plurality of data lines and the data signal from the storage cell output; outputting a jam latch output data signal as called for in claim 19.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hiep Nguyen whose telephone number is (571) 272-1752. The examiner can normally be reached on Monday to Friday from 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on (571) 272-1740. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hiep Nguyen

07-14-04

TUAN I.LAM PRIMARY EXAMINER